# LAPORAN TUGAS PEMROGRAMAN BERBASIS FRAMEWORK

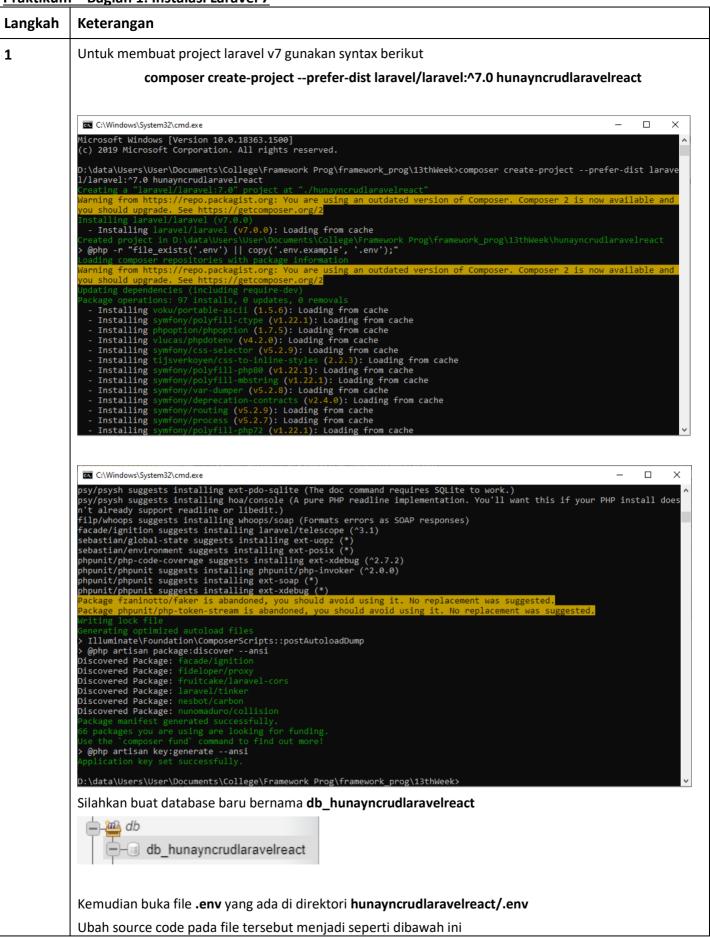
# Modul 13 CRUD 1 dengan Backend Laravel dan Frontend ReactJS



## Disusun Oleh:

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Program Studi D-IV Teknik Informatika Jurusan Teknologi Informasi Politeknik Negeri Malang Mei 2021 Praktikum - Bagian 1: Instalasi Laravel 7



```
9 DB_CONNECTION=mysql
10 DB_HOST=127.0.0.1
11 DB_PORT=3306
12 DB_DATABASE=db_hunayncrudlaravelreact
13 DB_USERNAME=root
14 DB_PASSWORD=
```

Masih di direktori project, ketik command berikut untuk membuat Model Article dan Migration-nya:

```
D:\data\Users\User\Documents\College\Framework Prog\framework_prog\13thWeek\hunayncrudlaravelreact>php artisan make:mode
l Article --migration
Model created successfully.
Created Migration: 2021_05_24_041046_create_articles_table
D:\data\Users\User\Documents\College\Framework Prog\framework_prog\13thWeek\hunayncrudlaravelreact>
```

Sekarang buka file Article.php yang ada di dalam direktori app/Article.php dan modifikasi:

Kemudian, buka file \*\*\*\*\*\*\*create\_articles\_table.php yang tersimpan di direktori database/migrations dan modifikasi seperti kode di bawah ini:

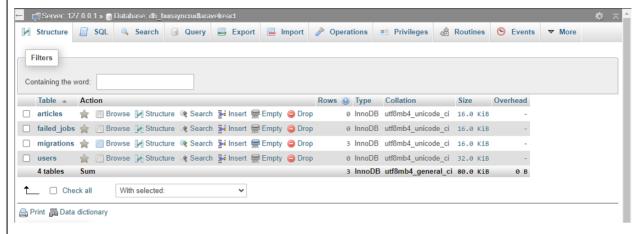
```
database > migrations > 🦛 2021_05_24_041046_create_articles_table.php > ધ CreateArticlesTable > 😚 up
  1 <?php
      use Illuminate\Database\Migrations\Migration;
      use Illuminate\Database\Schema\Blueprint;
      use Illuminate\Support\Facades\Schema;
      class CreateArticlesTable extends Migration
  Ω
  9
           * Run the migrations.
 10
 11
            * @return void
 12
 13
           public function up()
 14
 15
               Schema::create('articles', function (Blueprint $table) {
 16
                  $table->bigIncrements('id');
                  $table->string('title');
 19
                   $table->string('content');
 20
                   $table->timestamps();
               });
 21
 22
 23
 24
           * Reverse the migrations.
 25
 26
            * @return void
 27
 28
 29
          public function down()
               Schema::dropIfExists('articles');
 32
 29
           public function down()
 30
 31
               Schema::dropIfExists('articles');
 32
 33
 34
```

Kemudian jalankan command berikut ini agar table yang kita buat migrate ke database:

```
D:\data\Users\User\Documents\College\Framework Prog\framework_prog\13thWeek\hunayncrudlaravelreact>php artisan migrate
Migration table created successfully.
Migrating: 2014_10_12_000000_create_users_table
Migrated: 2014_10_12_000000_create_users_table (0.04 seconds)
Migrating: 2019_08_19_000000_create_failed_jobs_table
Migrated: 2019_08_19_000000_create_failed_jobs_table (0.03 seconds)
Migrating: 2021_05_24_041046_create_articles_table
Migrated: 2021_05_24_041046_create_articles_table (0.04 seconds)

D:\data\Users\User\Documents\College\Framework Prog\framework_prog\13thWeek\hunayncrudlaravelreact>
```

Jika berhasil dengan baik, maka di database db\_blog\_react akan muncul table seperti gambar di bawah ini:



Buka file routes/web.php dan silahkan modifikasi:

```
use Illuminate\Support\Facades\Route;
6
     | Web Routes
8
q
10
    | Here is where you can register web routes for your application. These
11
    routes are loaded by the RouteServiceProvider within a group which
    contains the "web" middleware group. Now create something great!
12
13
14
15
16 Route::view('/articles', 'app');
   Route::view('/article/edit/{id}', 'app');
17
   Route::view('/article/{id}', 'app');
18
19
   Route::view('/', 'app');
    Route::view('/{path}', 'app');
20
21
```

Kemudian buka file routes/api.php dan modifikasi menjadi:

```
routes > 💝 api.php
       <?php
        use Illuminate\Support\Facades\Route:
   6
         API Routes
  10
         Here is where you can register API routes for your application. These
         routes are loaded by the RouteServiceProvider within a group which is assigned the "api" middleware group. Enjoy building your API!
  11
  12
  13
  14
  15
       Route::get('/articles', 'ArticleController@index');
  16
       Route::post('/article/store', 'ArticleController@store');
Route::get('/article/edit/{id}', 'ArticleController@getArticle');
  17
  18
 19 Route::get('/article/{id}', 'ArticleController@getArticle');
20 Route::put('/article/{id}', 'ArticleController@update');
         Route::delete('/article/delete/{id}', 'ArticleController@delete');
  21
  22
```

### Ketik command di bawah ini untuk membuat controller baru bernama ArticleController

```
D:\data\Users\User\Documents\College\Framework Prog\framework_prog\13thWeek\hunayncrudlaravelreact>php artisan make:cont roller ArticleController
Controller created successfully.
D:\data\Users\User\Documents\College\Framework Prog\framework_prog\13thWeek\hunayncrudlaravelreact>
```

Sekarang buka file ArticleController.php yang terdapat di app/Http/Controllers.

### Kemudian ketik kode berikut ini:

```
app > Http > Controllers > ♠ ArticleController.php > ...
  1 <?php
      namespace App\Http\Controllers;
      use Illuminate\Http\Request;
  6
      class ArticleController extends Controller
           public function index()
 10
 11
              $articles = \App\Article::all();
 12
 13
              return $articles->toJson();
 14
 15
 16
           public function store(Request $request)
 17
 18
               $validatedData = $request->validate([
                   'title' => 'required',
 19
                   'content' => 'required',
 20
 21
 22
               $project = \App\Article::create([
 23
                   'title' => $validatedData['title'],
 24
                  'content' => $validatedData['content'],
 25
 26
               ]);
 27
 28
               $msg = [
 29
                   'success' => true,
 30
                   'message' => 'Article created successfully!'
 31
 32
```

```
return response()->json($msg);
34
35
36
         public function getArticle($id) // for edit and show
37
             $article = \App\Article::find($id);
38
39
40
             return $article->toJson():
41
42
43
         public function update(Request $request, $id)
45
             $validatedData = $request->validate([
                 'title' => 'required'
46
47
                 'content' => 'required',
48
             ]);
10
50
             $article = \App\Article::find($id);
51
             $article->title = $validatedData['title'];
52
             $article->content = $validatedData['content'];
53
             $article->save();
54
55
             $msg = [
                  'success' => true,
56
57
                 'message' => 'Article updated successfully'
58
             1;
60
             return response()->json($msg);
61
62
63
         public function delete($id)
                                                                                                  Go to Settings to activate Windows.
64
60
             return response()->json($msg);
61
62
63
         public function delete($id)
64
             $article = \App\Article::find($id);
65
             if (!emptv($article)) {
66
67
                 $article->delete();
68
                 $msg = [
                      'success' => true,
69
                     'message' => 'Article deleted successfully!'
70
71
                 1;
72
                 return response()->json($msg);
             } else {
74
                 $msg = [
75
                      'success' => false,
76
                     'message' => 'Article deleted failed!'
77
78
                 return response()->json($msg);
79
80
81
82
```

Jika Anda ingin menginstall package React Js, React Router Dom dan Sweet Alert, silahkan dimulai dari install package laravel ui dan laravel ui react berikut ini:

```
D:\data\Users\User\Documents\College\Framework Prog\framework_prog\13thWeek\hunayncrudlaravelreact>composer require lara vel/ui "^2.0"

Wanning from https://repo.packagist.org: You are using an outdated version of Composer. Composer 2 is now available and you should upgrade. See https://getcomposer.org/2

//composer.json has been updated
Loading composer repositories with package information
Warning from https://repo.packagist.org: You are using an outdated version of Composer. Composer 2 is now available and you should upgrade. See https://getcomposer.org/2

Updating dependencies (including require-dev)
Package operations: 1 install, 0 updates, 0 removals

- Installing laravel/ui (v2.5.0): Downloading (100%)
Package framinotto/faker is abandoned, you should avoid using it. No replacement was suggested.

Package phpunit/php-token-stream is abandoned, you should avoid using it. No replacement was suggested.

Writing lock file
Generating optimized autoload files
> Illuminate\Foundation\ComposerScripts::postAutoloadDump
> Ophp artisan package: facade/ignition
Discovered Package: facade/ignition
Discovered Package: fruitcake/laravel-cors
Discovered Package: laravel/tinker
Discovered Package: laravel/tinker
Discovered Package: nunomaduro/collision
Package manifest generated successfully.
66 packages you are using are looking for funding.
Use the 'composer fund' command to find out more!

D:\data\Users\User\Documents\College\Framework Prog\framework_prog\13thWeek\hunayncrudlaravelreact>
```

### Kemudian install react is:

```
D:\data\Users\User\Documents\College\Framework Prog\framework_prog\13thWeek\hunayncrudlaravelreact>php artisan ui react
React scaffolding installed successfully.
Please run "npm install && npm run dev" to compile your fresh scaffolding.
D:\data\Users\User\Documents\College\Framework Prog\framework prog\13thWeek\hunayncrudlaravelreact>
```

## Lalu install NodeJsnya:

```
C:\Windows\System32\cmd.exe
                                                                                                                                                П
                                                                                                                                                       ×
  :\data\Users\User\Documents\College\Framework Prog\framework_prog\13thWeek\hunayncrudlaravelreact>php artisan ui react
  lease run "npm install && npm run dev" to compile your fresh scaffolding.
 D:\data\Users\User\Documents\College\Framework Prog\framework prog\13thWeek\hunayncrudlaravelreact>npm install && npm ru
 mai
                 ecated popper.js@1.16.1: You can find the new Popper v2 at @popperjs/core, this package is dedicated to the
 legacy v1
                   ated chokidar@2.1.8: Chokidar 2 will break on node v14+. Upgrade to chokidar 3 with 15x less dependencies
              precated fsevents@1.2.13: fsevents 1 will break on node v14+ and could be using insecure binaries. Upgrade to
 fsevents 2.
          deprecated urix@0.1.0: Please see https://github.com/lydell/urix#deprecated deprecated resolve-url@0.2.1: https://github.com/lydell/resolve-url#deprecated ce created a lockfile as package-lock.json. You should commit this file. optional SKIPPING OPTIONAL DEPENDENCY: fsevents@^1.2.7 (node_modules\chokidar\node_modules\fsevents): notsup SKIPPING OPTIONAL DEPENDENCY: Unsupported platform for fsevents@1.2.13: wanted {"os":"darwin","arch":"an
 npm
 mar
 "} (current: {"os
                    SKIPPING OPTIONAL DEPENDENCY: fsevents@~2.3.1 (node_modules\watchpack\node_modules\chokidar\node_modul
 s\fsevents):
                    SKIPPING OPTIONAL DEPENDENCY: Unsupported platform for fsevents@2.3.2: wanted {"os":"darwin", "arch": "any
                   os":"win32","arch":"x64"})
al SKIPPING OPTIONAL DEPENDENCY: fsevents@~2.3.1 (node_modules\sass\node_modules\chokidar\node_modules\fs
 } (current: {"os'
 man
 vents):
 pm <mark>WARN</mark> notsup SKIPPING OPTIONAL DEPENDENCY: Unsupported platform for fsevents@2.3.2: wanted {"os":"darwin","arch":"any
} (current: {"os":"win32","arch":"x64"})
 dded 1129 packages from 500 contributors and audited 1133 packages in 57.034s
59 packages are looking for funding
98% after emitting SizeLimitsPlugin
     IE Compiled successfully in 12386ms
                                                                                                                                           11:44:18 AM
        Asset
                    Size
                             Chunks
                                                      Chunk Names
                 179 KiB /js/app
2 MiB /js/app
                                        [emitted]
[emitted]
                                                      /js/app
/js/app
D:\data\Users\User\Documents\College\Framework Prog\framework prog\13thWeek\hunayncrudlaravelreact>
```

### Kemudian install react router dom nya:

```
D:\data\Users\User\Documents\College\Framework Prog\framework_prog\13thWeek\hunayncrudlaravelreact>npm install react-rou ter-dom

npm WARN optional SKIPPING OPTIONAL DEPENDENCY: fsevents@1.2.13 (node_modules\fsevents):

npm WARN notsup SKIPPING OPTIONAL DEPENDENCY: Unsupported platform for fsevents@1.2.13: wanted {"os":"darwin","arch":"an y y"} (current: {"os":"win32","arch":"x64"})

npm WARN optional SKIPPING OPTIONAL DEPENDENCY: Unsupported platform for fsevents@2.3.2: wanted {"os":"darwin","arch":"any "} (current: {"os":"win32","arch":"x64"})

npm WARN optional SKIPPING OPTIONAL DEPENDENCY: Unsupported platform for fsevents@2.3.2: wanted {"os":"darwin","arch":"any "} (current: {"os":"win32","arch":"x64"})

npm WARN optional SKIPPING OPTIONAL DEPENDENCY: Unsupported platform for fsevents@2.3.2: wanted {"os":"darwin","arch":"any "} (current: {"os":"win32","arch":"x64"})

+ react-router-dom@5.2.0

added 11 packages from 6 contributors and audited 1144 packages in 11.302s

59 packages are looking for funding run `npm fund' for details

found 37 vulnerabilities (36 moderate, 1 high) run `npm audit fix` to fix them, or `npm audit` for details

D:\data\Users\User\Documents\College\Framework Prog\framework_prog\13thWeek\hunayncrudlaravelreact>
```

## dan terakhir sweet alertnya:

```
D:\data\Users\User\Documents\College\Framework Prog\framework_prog\13thWeek\hunayncrudlaravelreact>npm i react-bootstrap -sweetalert npm WARN optional SKIPPING OPTIONAL DEPENDENCY: fsevents@1.2.13 (node_modules\fsevents): npm WARN notsup SKIPPING OPTIONAL DEPENDENCY: Unsupported platform for fsevents@1.2.13: wanted {"os":"darwin","arch":"an y"} (current: {"os":"win32","arch":"x64"}) npm WARN optional SKIPPING OPTIONAL DEPENDENCY: fsevents@2.3.2 (node_modules\sass\node_modules\fsevents): npm WARN notsup SKIPPING OPTIONAL DEPENDENCY: Unsupported platform for fsevents@2.3.2: wanted {"os":"darwin","arch":"any "} (current: {"os":"win32","arch":"x64"}) npm WARN optional SKIPPING OPTIONAL DEPENDENCY: fsevents@2.3.2 (node_modules\watchpack\node_modules\fsevents): npm WARN notsup SKIPPING OPTIONAL DEPENDENCY: Unsupported platform for fsevents@2.3.2: wanted {"os":"darwin","arch":"any "} (current: {"os":"win32","arch":"x64"}) 
+ react-bootstrap-sweetalert@5.2.0 added 1 package from 1 contributor and audited 1145 packages in 12.137s

59 packages are looking for funding run `npm fund` for details

found 37 vulnerabilities (36 moderate, 1 high) run `npm audit fix` to fix them, or `npm audit` for details

D:\data\Users\User\Documents\College\Framework Prog\framework_prog\13thWeek\hunayncrudlaravelreact>
```

Buat file baru bernama App.js dan simpan di direktori resourses/js/components.

```
resources > js > components > JS App.js
    import React, { Component } from "react";
      import ReactDOM from "react-dom";
      import { BrowserRouter, Route, Switch } from "react-router-dom";
      import Header from "./Header";
      import ArticleIndex from "./ArticleIndex";
import ArticleCreate from "./ArticleCreate";
      import ArticleShow from "./ArticleShow";
      import ArticleEdit from "./ArticleEdit":
 8
 10
      class App extends Component {
 11
          render() {
 12
               return (
 13
                   <BrowserRouter>
 14
 16
 17
                                <Route exact path="/" component={ArticleIndex} />
 18
                                <Route exact path="/create" component={ArticleCreate} />
 19
                                <Route
                                   path="/article/edit/:id"
 20
 21
                                    component={ArticleEdit}
 22
                                <Route nath="/article/:id" component={ArticleShow} />
 23
                            </Switch>
 24
                        </div>
 25
                   </BrowserRouter>
 26
 27
       ReactDOM.render(<App />, document.getElementById("app"));
 31
 32
                                                                                                        Go to Settings to activate Windows.
```

Buat lagi file baru bernama Header.js dan simpan di direktori resourses/js/components.

```
resources > is > components > JS Header.is > ...
     import React from "react";
      import { Link } from "react-router-dom";
      const Header = () => (
          <nav className="navbar navbar-dark bg-dark">
              <div className="container">
                <Link className="navbar-brand" to="/">
                     Ilmu Coding
 q
                  </Link>
 10
              </div>
11
          </nav>
12
13
      export default Header;
14
15
```

Buat lagi file baru bernama ArticleIndex.js dan simpan di direktori resourses/js/components.

```
resources > is > components > JS ArticleIndex.is > ...
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Manual Control of the Control of the
                              import axios from "axios":
                               import axlos 'rom axlos',
import React, { Component } from "react";
import { Link } from "react-router-dom";
                               import SweetAlert from "react-bootstrap-sweetalert";
                                 class ArticleIndex extends Component {
                                                    constructor() {
                                                                        super();
                                                                          this.state = {
      10
                                                                                            articles: [],
      11
                                                                                            msg: null,
      12
                                                                                            type: null,
      13
                                                                                            flash: false.
      14
                                                                                            alert: null
      15
                                                                       1:
      16
      17
                                                    hideAlert() {
      18
                                                                        this.setState({
      19
      20
                                                                                     alert: null
      21
      22
                                                     componentDidMount() {
      24
      25
                                                                        axios.get("/api/articles").then(response => {
      26
                                                                                           this.setState({
      27
                                                                                                          articles: response.data
      28
                                                                                           });
      29
                                                                       });
      30
                                                    }
      31
```

## Buat lagi file baru bernama ArticleCreate.js dan simpan di direktori resourses/js/components.

```
resources > js > components > JS ArticleCreate.js > ...
      import axios from "axios";
      import React, { Component } from "react";
import { Link } from "react-router-dom";
      import SweetAlert from "react-bootstrap-sweetalert";
       class ArticleCreate extends Component {
           constructor(props) {
 8
               super(props);
  9
               this.state = {
                   title: "",
content: "",
 10
 11
                    alert: null,
 12
                    errors: []
 13
 14
               this.handleFieldChange = this.handleFieldChange.bind(this);
 15
               this.handleCreateNewArticle = this.handleCreateNewArticle.bind(this);
 17
               this.hasErrorFor = this.hasErrorFor.bind(this);
               this.renderErrorFor = this.renderErrorFor.bind(this);
 19
 20
 21
           handleFieldChange(event) {
 22
               this.setState({
                    [event.target.name]: event.target.value
 23
               });
 24
 25
 26
 27
           goToHome() {
               const getAlert = () => (
 28

√SweetAlert

 30
 31
                         title="Success!"
                        onConfirm={() => this.onSuccess()}
                                                                                                           Go to Settings to activate Windows.
```

Buat lagi file baru bernama ArticleEdit.js dan simpan di direktori resourses/js/components.

```
resources > is > components > JS ArticleEdit.is > ...
                                                                                                                                                                                                                                                                                                                                                                                                                            Manufacture of the control of the co
                   import axios from "axios":
                     import axlos ''om axlos',
import React, { Component } from "react";
import { Link } from "react-router-dom";
                    import SweetAlert from "react-bootstrap-sweetalert";
                     class ArticleEdit extends Component {
                                    constructor(props) {
                                                  super(props);
                                                  this.state = {
   title: "",
      9
    10
                                                                content: "",
    11
    12
                                                               alert: null,
                                                               message: "",
    13
    14
                                                               errors: []
    15
                                                1:
                                                 this.handleFieldChange = this.handleFieldChange.bind(this);
    16
    17
                                                  this.handleUndateArticle = this.handleUndateArticle.bind(this):
                                                  this.hasErrorFor = this.hasErrorFor.bind(this);
    18
                                                  this.renderErrorFor = this.renderErrorFor.bind(this);
    19
    20
    21
    22
                                    handleFieldChange(event) {
                                                 this.setState({
    24
                                                             [event.target.name]: event.target.value
    25
                                                });
    26
    27
    28
                                    componentDidMount() {
                                                 const articleId = this.props.match.params.id;
    29
    30
                                                                                                                                                                                                                                                                                                                                                Activate Windows
                                                  axios.get(`/api/article/edit/${articleId}`).then(response => {
    31
                                                 this.setState({
```

## Buat lagi file baru bernama ArticleShow.js dan simpan di direktori resourses/js/components.

```
resources > is > components > JS ArticleShow.is > ...
     import axios from "axios";
      import React, { Component } from "react";
import { Link } from "react-router-dom";
      class ArticleShow extends Component {
          constructor(props) {
              super(props);
               this.state = {
  9
                article: {}
 10
 11
 12
          componentDidMount() {
   const articleId = this.props.match.params.id;
 13
 14
 15
               axios.get(`/api/article/${articleId}`).then(response => {
 16
                this.setState({
 17
 18
                      article: response.data
 19
                  });
 20
              });
 21
 22
          render() {
 24
              const { article } = this.state;
 25
 26
 27
                   <div className="container py-4">
                      28
 29
                               <div className="card">
 30
                                                                                                    Activate Windows
                                  <div className="card-header">
 31
                                       Judul Artikel: {article.title}
```

Buat file baru bernama app.blade.php dan simpan di direktori resource/views.

```
resources > views > 💝 app.blade.php > 😭 html
     <!DOCTYPE html>
      <html lang="{{ app()->getLocale() }}">
      <head>
          <meta charset="utf-8">
          <meta http-equiv="X-UA-Compatible" content="IE=edge">
          <meta name="viewport" content="width=device-width, initial-scale=1">
          <!-- CSRF Token -->
          <meta name="csrf-token" content="{{ csrf_token() }}">
 10
 11
          <title>React Laravel</title>
 12
 13
 14
          <!-- Styles -->
 15
          <link href="{{ asset('css/app.css') }}" rel="stylesheet">
 16
      </head>
 17
 18
      <body>
          <div id="app"></div>
 19
 20
          <script src="{{ asset('js/app.js') }}"></script>
 21
 22
      </body>
      </html>
```

Silahkan buka file resources/js/app.js kemudian ubah source code menjadi seperti di bawah ini

```
/**

* Next, we will create a fresh React component instance and attach it to

* the page. Then, you may begin adding components to this application

* or customize the JavaScript scaffolding to fit your unique needs.

*/

require("./components/App");
```

Fungsinya agar antara file resourses/js/app.js dan resourses/js/components/App.js terhubung.

Ketik command berikut untuk menginstall perubahan yang terjadi:

```
×
  @ dev D:\data\Users\User\Documents\College\Framework Prog\framework_prog\13thWeek\hunayncrudlaravelreact
  npm run development
 @ development D:\data\Users\User\Documents\College\Framework Prog\framework_prog\13thWeek\hunayncrudlaravelreact
  cross-env NODE_ENV=development node_modules/webpack/bin/webpack.js --progress --hide-modules --config=node_modules/lar
avel-mix/setup/webpack.config.js
13% building 25/29 modules 4 active ...velreact\node_modules\@babel\runtime\helpers\esm\objectWithoutPropertiesLoose.jsD
EPRECATION WARNING: Using / for division is deprecated and will be removed in Dart Sass 2.0.0.
Recommendation: math.div($spacer, 2)
 ore info and automated migrator: https://sass-lang.com/d/slash-div
302
                                      $spacer / 2 !default;
      $headings-margin-bottom:
    node_modules\bootstrap\scss\variables.scss 302:31 @import
node_modules\bootstrap\scss\bootstrap.scss 9:9 @import
    stdin 8:9
                                                             root stylesheet
DEPRECATION WARNING: Using / for division is deprecated and will be removed in Dart Sass 2.0.0.
 Recommendation: math.div($input-padding-y, 2)
 ore info and automated migrator: https://sass-lang.com/d/slash-div
98% after emitting SizeLimitsPlugin
  Asset Size Chunks
ss/app.css 179 KiB /js/app [emitted]
/js/app.js 2.26 MiB /js/app [emitted]
                                               Chunk Names
                                               /js/app
/js/app
  \data\Users\User\Documents\College\Framework Prog\framework_prog\13thWeek\hunayncrudlaravelreact>
```

